

F3314(C)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Dyks et al.

Serial No.: 10/643,244

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Title: Process for the Manufacturing of Frozen Aerated Products

Group: 1781

Examiner: Kelly Jo Bekker

DECLARATION

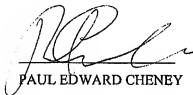
I, PAUL EDWARD CHENEY, declare and say as follows:

1. I am an employee of an affiliate of the assignee of the above identified application, having a place of business at Unilever R&D, Colworth, Sharnbrook, Bedford, MK44 1LQ, United Kingdom. I am presently Process Development Manager and have worked in the Ice Cream Category for Unilever for over 15 years.
2. I am a named inventor of the above identified application
3. I have read the above identified application and the current claims, as well as EZAKI JP App No. 60230711. I refer to the FLS translation of Ezaki.
4. Both our invention and Ezaki describe processes where two half moulds are completely filled with a frozen food. Due to the rheology of these foodstuffs (semi-solid plastic material akin to bread dough), significant pressure must be applied to them to ensure that they flow in to and are sufficiently distributed throughout the half moulds. In the case of aerated foodstuffs, pressurisation causes a reduction in its volume and expansion to the original volume will only occur if the aerated food is allowed to return to ambient pressure.

5. Our invention differs from Ezaki because we allow sufficient time and space for the aerated, frozen food to expand after mould filling and before fusing the two product halves together. In our process, it is expansion that causes the aerated foodstuff to protrude above the outer surface of the rollers and provide the glue that enables strong adhesion between the two product halves. By contrast, the Ezaki process does not allow sufficient time and space for the aerated frozen food to expand between mould filling and product fusion. In this process, the filler is in intimate contact with the outer surface of the rollers, preventing expansion, between filling and fusion. There is also very little distance between mould filling and product fusion. Therefore, the Ezaki process will result in product expansion after the two halves have been fused together.
6. One of ordinary skill would generally choose to place the filler in intimate contact with the roller, from filling through to product fusion, as Ezaki have done. This is to ensure that the product halves are retained in their moulds and are not prematurely released from the rollers before joining the halves together. Also, one of ordinary skill would generally choose to place the filler close to the point where the product halves are fused, as Ezaki have done. This is because this limits the distance between dividing the frozen food supply, from one to two streams, and the point of filling. And it is generally known that if this distance is small, there is low probability of environmental differences, around each of the outlet pipes, affecting the ratio of the flow division. Therefore, there is a much greater chance of dividing a single stream into two streams of equal flow rate, and maintaining this, if the distance between mould filling and product joining is small.
7. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further, that these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under

Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

DECLARED at Colworth, UK this 19TH of November 2010.



PAUL EDWARD CHENEY